



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/811,638

03/29/2004

W. Matthew Fender

47399-0095

2384

24115

7590

11/03/2006

BUCKINGHAM, DOOLITTLE & BURROUGHS, LLP
3800 EMBASSY PARKWAY
SUITE 300
AKRON, OH 44333

EXAMINER

NUTTER, NATHAN M

ART UNIT

PAPER NUMBER

1711

DATE MAILED: 11/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/811,638

Applicant(s)

FENDER ET AL.

Examiner

Nathan M. Nutter

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) 1-12 and 27-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-26 and 36-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

This application contains claims 1-12 and 27-35 drawn to an invention nonelected with traverse in the paper filed February 2005. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Response to Amendment

In response to the amendment of 21 September 2006, the following is being placed in effect.

The rejections of claims 13-26 and 36-46 under 35 U.S.C. 112, first paragraph, are hereby expressly withdrawn.

The rejection of claims 13-26 and 36-46 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, is hereby expressly withdrawn.

The rejections of claims 13-26 and 36-46 under 35 U.S.C. 103(a) as being unpatentable over the references Fujita et al (US 4,737,532) or Hendrickson et al (US 6,682,814), only, are hereby expressly withdrawn.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Art Unit: 1711

Claims 13-26 and 36-51 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Claims 13, 20, 46 and 51 recite "while simultaneously at least maintaining said flexural modulus and tensile properties of said composite, said properties compared to a composite without any added chlorinated paraffin wax resin." None of the language appears in the Specification, as originally filed. The recitation is drawn to comparison of properties that are not shown adequately compared as to make such assertion.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13-26 and 36-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edwards et al (US 4,659,754) or Castagna et al (US 5,075,359).

The patents to Edwards et al (US 4,659,754) and Castagna et al (US 5,075,359) show the manufacture of a cellulose-resin composite to which may be added a chlorinated resin comprising chlorinated paraffin wax.

Art Unit: 1711

Note in Edwards et al at the paragraph bridging column 3 to column 4. Further, note column 2 (line 26) to column 3 (line 2) for the various thermoplastic resins employed, and column 3 (lines 3 et seq.) for the use of cellulose. The process is shown essentially at column 5 (lines 1-35) and the Examples, as well as compositional limitations which appear to be within those recited. In Castagna et al, note the paragraph bridging column 2 to column 3 for the chlorinated paraffin wax, column 3 (lines 19 et seq.) for the cellulose component and the paragraph bridging column 4 to column 5 for the resin. The Abstract teaches the compositional limitations to be within those recited herein.

Both of the references teach essentially what is recited herein for inclusion and at a level of inclusion commensurate in scope thereto. The constituents are shown to be conventional, used in their art-recognized capacities. Nothing unexpected or surprising has been shown on the record with regard to the chlorinated paraffin wax resin or amount of inclusion thereof. As such, the instant claims are deemed to be obvious over the teachings of either Edwards et al or Castagna et al in the sense of 35 USC 103.

Response to Arguments

Applicant's arguments filed 21 September 2006 have been fully considered but they are not persuasive.

Applicants argue Edwards et al teach "nothing about physical properties of any resulting polymer composite. It is completely silent as to how it would be possible to achieve the highly desirable characteristics of increasing production of product by

Art Unit: 1711

reducing extruder torque while at least maintaining flexural modulus and/or increasing tensile strength of the final composite as present in the claims," yet, have provided no evidence or comparisons with the compositions taught herein that differentiates over that of the reference. Patentees do not have to recognize each and every feature, characteristic or property of their composition to obviate the instant claims. Furthermore, it is noted that such recitation is given little weight since the claims are drawn to a "process" and not to a product. Since the recitation:

"said addition of said paraffin wax chlorinated resin reducing extruder torque during processing while essentially maintaining flexural modulus of said extruded composite and increasing tensile strength of said extruded composite, said properties compared to a composite without any added chlorinated paraffin wax resin," is not a step in the process, it cannot be determinative of whether a reference obviates or anticipates the claims. Applicants further assert,

"(a)s clearly shown in Table 1, the substitution of a known standard lubricant as identified in the first column, with the chlorinated paraffin wax resin of the applicant's invention does not result in the invention. In fact, as clearly shown in Figs. 1-3, while flexural modulus (Fig. 2) and tensile strength (Fig. 3) are improved for DB 1000, the extruder torque also increases as shown in Fig. 1. This is not a workable combination. In Table 1, only DB 4000 and DB 4300 meet the above criteria. In Table 2, only formulation B and E (2nd occurrence) meet the requisite criteria in comparison to the standard defined in the first column."

Art Unit: 1711

This paragraph does not provide any reasoning as to why Edwards et al does not obviate the claims. The paragraph is further deemed to confound what applicants argue since this appears to indicate lack of support for the breadth of the present claims.

With regard to Castagna et al, the same arguments were implicitly presented, and the Examiner replies in kind. It is simply not relevant to the process herein claimed, that patentee recognize "how to increase production of product by reducing extruder torque while at least maintaining flexural modulus and/or increasing tensile strength of the final composite as present in the claims," firstly since it is not a step of the process. Secondly, applicants have not shown that the reference would not produce such benefit.

A skilled artisan would have a high level of expectation of success to achieve the instantly claimed invention from either reference to Edwards et al or Castagna et al.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

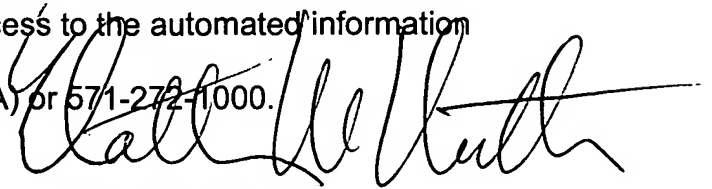
Art Unit: 1711

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan M. Nutter whose telephone number is 571-272-1076. The examiner can normally be reached on 9:30 a.m.-6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Nathan M. Nutter
Primary Examiner
Art Unit 1711

nmn

28 October 2006